

IN THE CLAIMS:

Claim 1 (previously presented): A window wiper comprising:
a sticking unit which is adapted to adhere to a windowpane in a window frame when in use;
a wiping unit which is mounted on the sticking unit and fitted in a rectangular outer frame; and
a running unit which is mounted on the sticking unit and fitted in an inner frame turnable in the outer frame, said inner and outer frames being freely rotatable with respect to each other.

Claim 2 (currently amended): ~~The window wiper according to claim 1, A window wiper comprising:~~
a sticking unit which is adapted to adhere to a windowpane in a window frame when in use;
a wiping unit which is mounted on the sticking unit and fitted in a rectangular outer frame; and
a running unit which is mounted on the sticking unit and fitted in an inner frame turnable in the outer frame, said inner and outer frames being freely rotatable with respect to each other;
wherein the inner frame is fitted with a vacuum generator which is a component of the sticking unit.

Claim 3 (previously presented): The window wiper according to claim 2, wherein a power supply is disposed below the center of the running unit of the outer frame of the window wiper on the windowpane.

Claim 4 (currently amended): ~~The window wiper according to claim 1, further comprising:~~ A window wiper comprising:
a sticking unit which is adapted to adhere to a windowpane in a window frame when in use;
a wiping unit which is mounted on the sticking unit and fitted in a rectangular outer

frame;

a running unit which is mounted on the sticking unit and fitted in an inner frame turnable in the outer frame, said inner and outer frames being freely rotatable with respect to each other;

a top sensor and a bottom sensor which are fixed to the top side and the bottom side, respectively, of the window wiper on the windowpane and detect the window frame; and

a controller to which the top and bottom sensors send signals when they have detected the window frame,

the controller having a run processor which makes the running unit run vertically, upward and downward, and shift its vertical running course laterally each time the top or bottom sensor detects the window frame.

Claim 5 (original): The window wiper according to claim 4, characterized by the distance of the lateral shift which is smaller than the width of the wiping unit.

Claim 6 (currently amended): ~~The window wiper according to claim 1;~~ A window wiper comprising:

a sticking unit which is adapted to adhere to a windowpane in a window frame when in use;

a wiping unit which is mounted on the sticking unit and fitted in a rectangular outer frame; and

a running unit which is mounted on the sticking unit and fitted in an inner frame turnable in the outer frame, said inner and outer frames being freely rotatable with respect to each other;

wherein:

the sticking unit has a sucker; and

the running unit has wheels,

the coefficient of friction between the sucker and the windowpane being smaller than that between the wheels and the windowpane.

Claim 7 (currently amended): ~~The window wiper according to claim 1;~~ A window wiper comprising:

a sticking unit which is adapted to adhere to a windowpane in a window frame when in use;

a wiping unit which is mounted on the sticking unit and fitted in a rectangular outer frame; and

a running unit which is mounted on the sticking unit and fitted in an inner frame turnable in the outer frame, said inner and outer frames being freely rotatable with respect to each other;

wherein:

the running unit has wheels and motors for driving the wheels; and

the motors are of a stepping type.

Claim 8 (original): The window wiper according to claim 4, wherein:
the running unit is provided with sensors for detecting the deviation of the running direction of the running unit; and

the controller has a running-direction corrector to correct the deviation of the running direction of the running unit.

Claim 9 (previously presented): The window wiper according to claim 1, wherein the wiping unit is mounted on the sticking unit so that the former can freely be removed from the latter.